

REMARKS

Claims 1-41 were originally filed in the present application.

Claims 1-8, 10, 14-23, 25, 29-35, and 40-47 are pending in the present application.

Claims 1-10, 14-25, 29-35, 40-47 were rejected in the September 4, 2008 Office Action.

No claims have been allowed.

Claims 9, 11-13, 24, 26-28, and 36-39 were previously canceled.

Claims 1-8, 10, 14-23, 25, 29-35, and 40-47 remain in the present application.

Reconsideration of the claims is respectfully requested.

I. CLAIM REJECTIONS -- 35 U.S.C. § 102

Claims 1-3, 5-7, 14-18, 20-22, 29-32, 34 35, and 40-47 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2002/0146983 to *Scherzer*, hereinafter "Scherzer '983". This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131, p. 2100-76 (8th ed., rev. 4, October 2005) (*citing In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. *Id.* (*citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)).

Client 1 comprises unique and novel elements, including those emphasized below:

1. For use in a wireless network, a base station capable of serving multiple mobile stations, said base station comprising:

a transceiver operable to receive from a select one of the multiple mobile stations a value of a first pilot strength signal and a value of a second pilot strength signal over a beam update time and multiple power control signals during said beam update time; and

beam forming circuitry operable to calculate a differential pilot strength corresponding to a difference between a value of said first pilot strength signal and a value of said second pilot strength signal, to calculate a differential power control corresponding to two or more of said multiple power control signals and to form a downlink traffic beam spatially directed to serve said select one of said multiple mobile stations, said downlink traffic beam having *a beam width set as a function of said differential pilot strength and said differential power control. (Emphasis added).*

The Applicants submit that the above emphasized limitations are not taught, suggested or hinted at in Scherzer '983.

Specifically, Claim 1 comprises the element "*a beam width set as a function of said differential pilot strength and said differential power control.*" This element is not anticipated by the prior art of record. In the September 4, 2008 rejection, the Examiner asserts that this element is anticipated by [0077] of Scherzer, which is reproduced herein for clarity:

However, *if the difference between the more aggressive beam configuration channel characteristic information and the less aggressive beam configuration channel characteristic information is greater than a preselected threshold value, a conclusion that the selected beam configuration does not provide a desired level of improvement over the current beam configuration is made.* For example, the channel characteristic information may indicate that a phase mismatch exists between the pilot channel and the traffic channel or that a decrease in traffic channel signal level to interference is experienced associated with the narrowing of the antenna beam. Accordingly, thereafter, processing proceeds to step 312 where the beam configuration index may be backed off one or more steps in the beam hierarchy to select a previous or less aggressive beam configuration. Operation of the illustrated embodiment of the present invention preferably backs off the beam configuration index in order to

operate to analyze a seemingly optimized beam configuration to determine if that configuration is or remains a best choice. Specifically, although it is determined in step 311 that a more aggressive beam configuration does not provide improvement over the current beam configuration, the preferred embodiment operates to further analyze the current beam configuration to determine if a less aggressive beam configuration provides improvement over the current beam configuration. Accordingly, after selection of a new beam configuration index at step 312, processing according to the illustrated embodiment proceeds to step 308 for a determination as to whether the optimization epoch for the selected mobile unit has expired. *Preferably, the present invention operates to minimize the transmit power level as well as other communication link characteristics and therefore attempts to minimize the gradient of the communication link attributes (e.g., transmit power level and beam width) by implementing configuration change decisions again and again.* [Emphasis Added]

Nowhere in the cited reference is the "*beam width set as a function of said differential pilot strength and said differential power control*". The configuration of Scherzer is based upon a "predetermined threshold" not a "*a function of said differential pilot strength and said differential power control.*" Therefore, it is respectfully submitted that Scherzer does not teach, suggest, or anticipate all of the elements of Claim 1.

Moreover, the Examiner asserts that Scherzer '983 describes calculating a differential power control in paragraph [0077], "a decrease in traffic channel signal level to interference is experienced." *Office Action mailed September 4, 2008, page 3, first paragraph.* The complete sentence from Scherzer '983 states: "For example, the channel characteristic information may indicate that a phase mismatch exists between the pilot channel and the traffic channel or that a decrease in traffic channel signal level to interference is experienced associated with the narrowing of the antenna beam." As such, the cited passage describes one of two indications that may be

provided by channel characteristic information received from a mobile station in response to a chosen antenna beam configuration. *See Scherzer '983, page 8, paragraph [0071]*. However, the Applicants are unable to find in the cited passage, the cited paragraph, or the remainder of Scherzer '983 any description of the channel characteristic information includes power control signals.

The Examiner has responded to this by stating that this is anticipated because Scherzer discloses a plurality of beam configurations with a plurality of transmit powers. The Applicants respectfully point out that nowhere in these sections is a differential power control calculated. Comparing "beam results" is not the same as calculating "a differential pilot strength corresponding to a difference between a value of said first pilot strength signal and a value of said second pilot strength signal", as claimed in Claim 1.

The Applicants respectfully submit that Scherzer '983 does not describe receiving multiple power control signals and, therefore, cannot describe calculating a differential power control corresponding to two or more of the multiple power control signals. For at least these reasons, the Applicants submit that amended independent Claim 1 is patentable over Scherzer '983. Amended independent Claims 16 and 31 recite limitations analogous to the novel and non-obvious limitations emphasized in traversing the rejection of Claim 1. Therefore, Claims 16 and 31 also are patentable over Scherzer '983. Claims 2, 3, 5-7, 14 and 15 depend from Claim 1, Claims 17, 18, 20-22, 29 and 30 depend from Claim 16, Claims 32, 34, 35, 40 and 41 depend from Claim 31, and include all the limitations of their respective base claims. As such, Claims 2, 3, 5-7, 14, 15, 17, 18, 20-22, 29, 30, 32, 34, 35, 40 and 41 also are patentable over Scherzer '983.

Accordingly, the Applicants respectfully request that the Examiner withdraw the §102 rejection of Claims 1-3, 5-7, 14-18, 20-22, 29-32, 34, 35, and 40-47.

Accordingly, the Applicants respectfully request the Examiner to withdraw the § 102 rejection with respect to these claims.

II. CLAIM REJECTIONS -- 35 U.S.C. § 103

Claims 4, 19, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Scherzer, in view of U.S. Patent No. 6,895,258 to "*Scherzer et al.*" hereinafter "Scherzer '258". The Applicants respectfully traverse the rejection.

Claims 8 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Scherzer '983, in view of U.S. Patent No. 6,148,208 to "*Love*" hereinafter "Love". The Applicants respectfully traverse the rejection.

Claims 10 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Scherzer '983, in view of U.S. Patent No. 7,054,662 to "*Judson*" hereinafter "Judson".

The Applicants respectfully traverse the rejection.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142, p. 2100-133 (8th ed. rev. 4, October 2005). Absent such a *prima facie* case, the Applicant is under no obligation to produce evidence of nonobviousness. *Id.* To establish a *prima facie* case of obviousness, three basic criteria must be met: *Id.* First, there must be some suggestion or motivation, either in the references themselves or in

the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *Id.* Second, there must be a reasonable expectation of success. *Id.* Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *Id.* The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *Id.*

Claims 4, 8, 10, 23, 25, and 44 depend directly or indirectly from Claims 1, 16, and 31, and are therefore respectfully submitted to be patentable for the reasons stated above.

Accordingly, the Applicants respectfully request the Examiner to withdraw the § 103 rejection with respect to these claims.

SUMMARY

For the reasons given above, the Applicants respectfully request reconsideration and allowance of the pending claims and that this application be passed to issue. If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@munckcarter.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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